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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,802	07/30/2003	Akira Nagashima	03500.015658.2	7925
5514	7590	10/03/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			SHAH, MANISH S	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2853	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/629,802

Applicant(s)

NAGASHIMA ET AL.

Examiner

Manish S. Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 49-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49-64, 68-77 and 81-87 is/are rejected.
- 7) ☒ Claim(s) 65-67 and 78-80 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/923,417.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 49-53, 82-83 & 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (# US 6176908).

Bauer et al. discloses an inkjet recording process, including the step of ejecting the ink from the orifice in response to recording signal (column: 4, line: 25-36; column: 10, line: 55-67), wherein the ink including a first (organic solvent) (column: 2, line: 47-67) and a second organic compound (surfactant) (column: 4, line: 1-10), which is incompatible with each other; at least one compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties (column: 3, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 3, line: 24-65). They also disclose that the step includes a sub step of applying thermal energy to the ink (column: 4, line: 30-36). They also disclose that an Acid Red 52 (which fluorescent) may be used as an anionic dye present in the amount of 0.05 to 2% by weight in the magenta dye (column: 3, line: 1-23; see Table: 1).

However, Bauer et al. didn't disclose or suggest the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid.

In the position of the Examiner that when the same components, taught in Applicant's specification and Bauer et al. reference are used, the ink composition, will behave the same manner, so it is obvious that the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid is performed by Bauer et al. ink composition.

2. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auslander et al. (# US 5681381).

Auslander et al. discloses a method of elongating the life time of fluorescence of a fluorescent colored portion of a recorded article including a recording medium and a colored portion provided thereon, wherein the colored portion formed by an inkjet recording process, including the step of ejecting the ink from the orifice in response to recording signal (column: 6 line: 60-65), wherein the ink including a first (organic solvent) (column: 6, line: 50-60) and a second organic compound (surfactant) (column: 7, line: 35-50), which is incompatible with each other; a compound having a vapor pressure not lower than that of diethyleneglycol (column: 3, line: 60-67; column: 4, line: 1-10) at least one compound exhibiting fluorescence properties and a coloring material

exhibiting fluorescence properties (column: 7, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 7, line: 1-24).

However, Auslander et al. didn't disclose or suggest the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid.

In the position of the Examiner that when the same components, taught in Applicant's specification and in Auslander et al. reference are used, the ink composition, will behave the same manner, so it is obvious that the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid is performed by Auslander et al. ink composition.

3. Claims 54-81 & 86-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tochiara et al. (# US 5485188) in view of Bauer et al. (# US 6176908).

Tochiara et al. discloses an ink jet recording apparatus (figure: 4) including a recording unit (figure: 6) and an ink cartridge (figure: 5), which comprises an ink container (element: 40, figure: 5) and a head portion for ejecting the ink (element: 71, figure: 6), the ink container containing ink including a first organic compound (column: 5, line: 40-58) and a second organic compound (nonionic surfactant) (column: 5, line: 1-10) and a liquid medium dissolving or dispersing the component (column: 5, line: 55-67). They also disclose that the head portion has a construction that thermal energy is applied to the ink to eject the ink (column: 8, line: 1-13); the ink container includes a

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polyolefin (column: 7, line: 54-56) and the ink holding unit includes a porous material or polyurethane or polyolefin (column: 7, line: 54-56). They also disclose that the ink holding member has a multi layer structure, wherein the direction of the multi layer arrangement of the multi-layer structure is aligned in an ink discharging direction of the ink container (figure: 1). They also disclose that an Acid Red 52 (which fluorescent) may be used as an anionic dye present in the amount of 0.1 to 5% by weight in the magenta dye (column: 5, line: 17-23).

Tochihara et al. differ from the claim of the present invention in that (1) the ink containing at least one compounds exhibiting fluorescents properties and a coloring material exhibiting fluorescence properties. (2) The first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid.

Bauer et al. teaches that to get the fluorescent image ink composition including a first (organic solvent) (column: 2, line: 47-67) and a second organic compound (surfactant) (column: 4, line: 1-10), which is incompatible with each other; at least one compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties (column: 3, line: 1-22) and a liquid medium dissolving or dispersing the components therein (column: 3, line: 24-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Tochihara et al. by the aforementioned teaching of Bauer et al. in order to have a fluorescent and water fastness printed image.

In the position of the Examiner that when the same components, taught in Applicant's specification and in Tochiara et al. reference are used, the ink composition, will behave the same manner, so it is obvious that the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid is performed by Tochiara et al. ink composition.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 49, 54, 68, 82 & 85 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/629,620. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the applications are directed to fluorescent ink composition. Instant application (802) claiming inkjet

recording process, a recording unit, an ink cartridge and an inkjet recording apparatus.

The only difference is preamble, all other limitation are same as ink composition of copending application (620). The preamble dose not limit the claimed invention.

However, the co-pending application did not claim of ink printing method but it is obvious to one of ordinary skill in the art that to get the printed image use the ink jet printing method steps of pending application.

It was obvious to one of ordinary skill in the art at the time of invention was made to use the ink taught in the co-pending application in to the ink jet printing method of pending application to get the printed image with better color gamut.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Allowable Subject Matter***

6. Claims 65-67 & 78-80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

(1) With respect to claims 65 & 78, the ink-holding member is composed of fiber flocculate.

(2) With respect to claims 66-67 & 79-80, which are depends on claims 65 and 78 respectively.



***Response to Arguments***

Applicant's arguments filed 08/01/2005 have been fully considered but they are not persuasive. Applicant argues that the references didn't disclose or suggest the feature of the first and second organic compounds dissolved or dispersed in the liquid medium of the fluorescent ink cause liquid-liquid separation upon decrease in the amount of the liquid.

It is the position of the Examiner that when the same components, taught in Applicant's specification are used, that the ink composition will behave the in same manner. These arguments are not deemed persuasive since arguments cannot take the place of evidence in the record to overcome a rejection. See MPEP 2145.

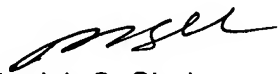
A reference is good not only for what it teachings by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. In re Opprecht 12 USPQ 2d 1235, 1236 (Fed. Cir. 1989); In re Bode 193 USPQ 12 (CCPA 1976); In re Lamberti 192 USPQ 278 (CCPA 1976); In re Bozek 143 USPQ 545, 549 (CCPA 1969); In re Preda 159 USPQ 342 (CCPA 1968); In re Van Mater 144 USPQ 421 (CCPA 1965); In re Jacoby 135 USPQ 317 (CCPA 1962); In re LeGrice 133 USPQ 365 (CCPA 1962).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Manish S. Shah  
Primary Examiner  
Art Unit 2853

MSS

9/28/05